This collection offers cultural historical analyses of enfreakment and freak shows, examining the social construction and spectacular display of wondrous, monstrous, or curious Otherness in the formerly relatively neglected region of Continental Europe. Forgotten stories are uncovered about freak-show celebrities, medical specimen, and philosophical fantasies presenting the anatomically unusual in a wide range of sites, including curiosity cabinets, anatomical museums, and traveling circus acts. The essays explore the locally specific dimensions of the exhibition of extraordinary bodies within their particular historical, cultural and political context. Thus the impact of the Nazi eugenics programs, state Socialism, or the Chernobyl catastrophe is observed closely and yet the transnational dimensions of enfreakment are made obvious through topics ranging from Jesuit missionaries' diabolization of American Indians, to translations of Continental European teratology in British medical journals, and the Hollywood silver screen's colonization of European fantasies about deformity. Although Continental European freaks are introduced as products of ideologically-infiltrated representations, they also emerge as embodied subjects endowed with their own voice, view, and subversive agency.

Anna Kérchy is a Senior Assistant Professor and a member of the Gender Studies Research Group at the Institute of English and American Studies at the University of Szeged, Hungary. She holds a PhD in Literature from the University of Szeged and a DEA in Semiology from Université Paris VII. Her monograph *Body-Texts in Angela Carter: Writing from a Corporeagraphic Point of View* (2008) offers a corporeal narratological analysis of self-enfreaked embodiments' feminist potentials. One of her major research interests centers on the figure of the freak in Victorian and postmodern fantastic imagination, and intermedial cultural representations.

Andrea Zittlau is an Assistant Professor in the Department for American Studies and a Coordinator of the Graduate School program "Cultural Encounters and Discourses of Scholarship" at the University of Rostock, Germany. She wrote her PhD thesis about the representation of Native American cultures in ethnographic museums. Her current research concentrates on ethnographic and medical museums, as well as on freakery and the medical body.

ISBN 978-1-4438-4134-4

www.c-s-p.org

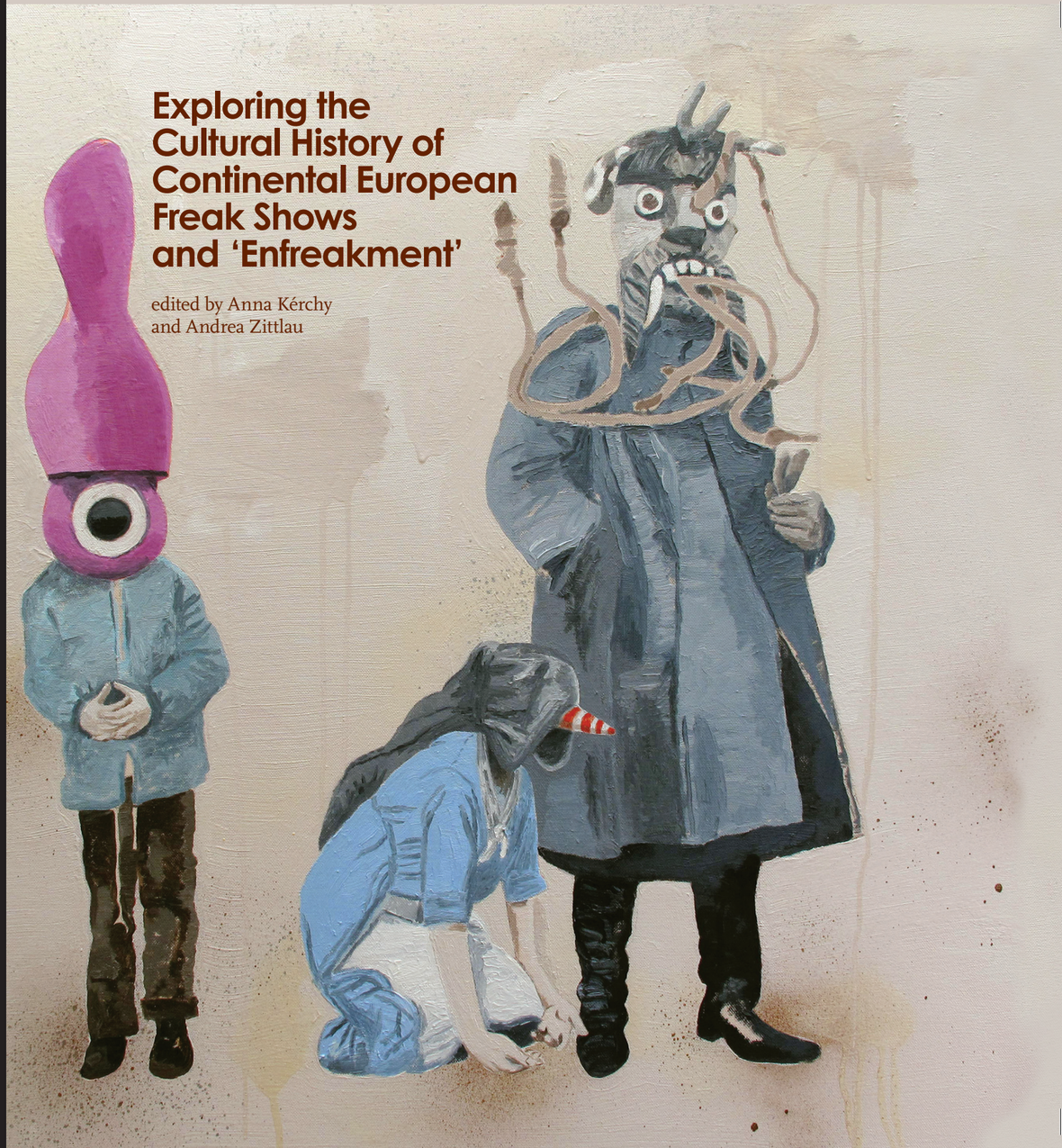
ISBN 1-4438-4134-X 90000

9 781443 841344

Exploring the Cultural History of Continental European Freak Shows and 'Enfreakment'

edited by Anna Kérchy and Andrea Zittlau

CSP



Exploring the Cultural History of Continental European Freak Shows and 'Enfreakment'

edited by Anna Kérchy
and Andrea Zittlau

TABLE OF CONTENTS

THE DIDEROT FREAK SHOW: THE MONSTER LABORATORY IN *D'ALEMBERT'S DREAM*

DÓRA SZÉKESI

Interest in monsters is as old as mankind, yet the important role they play throughout the civilisation process and in mankind's making sense of itself is first reflected on in a systematic manner in the Age of Enlightenment. The contribution of eighteenth century French thinkers and scientists to the subject of monstrosity is undoubtedly substantial. The change in the treatment of the freak forms part of an epistemological shift that can be referred to as the "disenchantment of the strange" (*désenchantement de l'étrange*).[1] Corporeal alterity moves from the realm of the unknown to that of the comprehensible, the development of anatomical and physiological observations contribute to the demystification, rationalisation and medicalization of the deformed body. Monstrous bodies become objects and tools of medical investigation; they are a substitute for unperformable experiments.[2]

Terms used in the eighteenth century in relation with the freak, such as "lapsus of nature" (*écart de la nature*), "trouble in the normal order of things" (*trouble de l'ordre normal des choses*), "disorder" (*désordre*), "vice" (*vice*), etc. testify to the general view about them. They are considered as erroneous creatures offensive to nature, as intruders which have to be eliminated from man's orderly world. The status of monstrosity is conceived as "being somehow beyond nature," the freak is recognised as

---

[1] Term used by Jean-Jacques Courtine, "Le corps inhumain," in *Histoire du corps: De la Renaissance aux Lumières*, Georges Vigarello et al. (eds.), vol. 1 (Paris: Seuil, 2005), p. 374.

[2] May Spangler. "Les monstres textuels dans le transformisme de Diderot" in *Recherches sur Diderot et sur l'Encyclopédie*, 29 (2003): p. 140. "En devenant un objet de la science, il devient aussi un 'instrument de la science :' il sert par exemple de substitut à des expériences qu'on ne peut pas accomplir."

"an additional order of reality, a second or counter-nature."[3] As the "Monstre" entry of the *Encyclopédie de Diderot et D'Alembert* puts it, a monster is "an animal born with a conformation contrary to the order of nature, that is to say with a certain physical structure of body parts very different from those of the species the animal originates from."[4]

Diderot's thinking about the monster is obviously influenced by the conceptual structure of his era and the terms in use are embraced by him, too. Yet, unlike many thinkers and naturalists of his time, he rejects the tabulation of nature's phenomena according to categories of order and disorder. He treats the freak as a natural phenomenon and considers its examination essential for gaining a clear picture of nature and man. As Norman Laidlaw points out "[teratology] led him [Diderot] to one of the earliest applications of a method that has since become standard—the detailed examination of the aberrant in search of clues to the normal."[5]

Although Diderot does not create a systematic work about the monster, real and imagined oddities keep cropping up throughout his writings. As philosopher, scientist and art theorist, he is simultaneously preoccupied with the physical, moral, aesthetic and poetic aspects of monstrosity. His speculation about the monster is influenced by the medical reports of the *Académie de médecine*, the works and theories of such thinkers and scientists as Buffon, Linnae, Réaumur, Rouelle, Maupertuis, Bonnet, Trembley or Needham. Besides the vast readings, his personal observations must also be taken into account. He attends, for example, Marie-Catherine Bihéron's anatomy courses, and visits her cabinet where he could see the wax model of a Cyclops-like creature.[6] Other personal observations

---

[3] Andrew Curran, *Sublime Disorder. Physical Monstrosity in Diderot's Universe* (Oxford: Voltaire Foundation, 2001), pp. 13–4.

[4] Jean Henri Samuel Formey, "Monstre," in *Encyclopédie de Diderot et D'Alembert*, *ou dictionnaire raisonné des sciences, des arts et des métiers*, CD-ROM edition (Paris: Redon, 2001). "l'animal qui naît avec une conformation *contraire à l'ordre de la nature*, c'est-à-dire avec une structure de parties très différentes de celles qui caractérisent l'espèce des animaux dont il sort."

[5] Norman Laidlaw, "Diderot's Teratology," in *Diderot Studies* 4 (1963): pp. 105–6. Regarding the question of "the examination of the aberrant in search of clues to the normal," Andrew Curran points out that Diderot provides a "rewriting of a Baconian treatment of monstrosity" in his works, "on several significant occasions, Diderot does seem to abide by a pragmatic Baconian view of monstrosity, affirming that the counterexample—be it physical or moral—provides some sort of a tangible difference with which one can measure the rest of the world." Curran, *Sublime Disorder*, pp. 22–3.

[6] Angelica Goodden, *Diderot and the Body* (University of Oxford: Legenda, 2001), p. 58.

include the philosophical interrogatory of blind persons such as the man of Puisaux or Mélanie de Salignac,[7] about whom Diderot writes in his *Letter on the Blind* (1749) (*Lettre sur les aveugles*).[8]

The pinnacle of Diderot's materialist theories on the monster is *D'Alembert's Dream* (1769) (*Le Rêve de d'Alembert*),[9] an ensemble of three philosophical dialogues on life and nature. In this unique text Diderot expresses contemporary scientific ideas by literary means. Questions on the origin of life, animal reproduction, the constitution of organisms, the formation of the self, psychological and moral behaviour, among others, are repeatedly discussed by the characters. Characters always act as connecting links in the chain of thoughts. In his dream D'Alembert[10] is fantasizing about the conversation he had with the Diderot-character some hours earlier. Meanwhile, Julie de L'Espinasse[11] is taking notes of the dreaming mathematician's ravings, and her notes serve as a starting point for her conversation with Doctor Bordeu,[12] who arrives to heal

---

[7] Mélanie de Salignac was a sensation in the eighteenth century Paris. Diderot, greatly impressed by her accomplishments, tells some thirty years later in an addition of his famous *Letter on the Blind* how Mademoiselle Salignac was taught to read using cut-out card letters and to write by pricking pieces of paper stretched on a frame. See Denis Diderot, *Additions à la Lettre sur les aveugles*, in *Œuvres*, Vol. 1: *Philosophie*, Laurent Versini (ed.) (Paris: Robert-Laffont, 1994), pp. 187–96.

[8] Denis Diderot, *Lettre sur les aveugles à l'usage de ceux qui voient*, in *Œuvres*, vol. 1: *Philosophie*, Laurent Versini (ed.) (Paris: Robert-Laffont, 1994), pp. 139–85.

[9] Denis Diderot, *Le Rêve de d'Alembert*, in *Œuvres*, vol. 1: *Philosophie*, Laurent Versini (ed.) (Paris: Robert-Laffont, 1994), pp. 611–76. In my essay references will be made to the English translation of *D'Alembert's Dream*, made by Leonard Tancock.

[10] Jean Le Rond D'Alembert, who figures as a character in Diderot's text, was a French mathematician and philosopher and Diderot's joint editor of the *Encyclopédie* from 1747 to 1758.

[11] Julie de l'Espinasse was an illegitimate daughter of the Comtesse d'Albon. Her father's sister, Madame du Deffand, a hostess of one of the most famous salons in Europe, recognized Julie's talents and persuaded her to come to Paris as her companion. Great social and literary figures of the age came to Deffand's salon, such as Voltaire, Montesquieu, Marmontel, Rousseau and D'Alembert. Madame du Deffand was very much devoted to D'Alembert with whom Julie also developed a close friendship. This led to a violent quarrel between the two women, and Julie de l'Espinasse set up a new salon of her own.

[12] Théophile de Bordeu, the mouthpiece for Diderot's arguments in *D'Alembert's dream*, was a distinguished doctor in the eighteenth century. He contributed to the *Encyclopédie* and undertook considerable research into the behaviour of the pulse.

D'Alembert. They summarise the previous hallucinations, complement them with contemporary scientific ideas and create an imaginary monster laboratory where the mad conjectures of dream are fused with real experiences. Melting factual with fictional elements in his writing is a conscious choice on Diderot's part. He puts his words into the mouth of a dreaming man because "one often needs to present wisdom as madness,"[13] as he declares to Sophie Volland in connection with writing *D'Alembert's Dream*.

An impressive array of monstrosities are brought forth in the monster parade of *D'Alembert's Dream*, developmental deformities (conjoint twins and hermaphrodites), mythical monsters (Cyclopes and goat-men), and other imaginary and horrendous creatures such as human polyps are staged in the imaginary freak show. Although Diderot mentions real bodily deformations, too, and speaks of flesh and blood freaks, his extraordinary creatures can rather be regarded as "textual monsters"[14] which are nourished from and by the text and come to life in textual images. This essay undertakes to explore the place of the freak in Diderot's philosophy of nature through the depiction of the monster parade presented in *D'Alembert's Dream*. An investigation into the physical, poetical and moral aspects of monstrosity will reveal how the freak accounts for the formation of identity and for the relativisation of social norms in Diderot's discourse through the genuine intertwining of factual and fictional elements.

Very often Diderot's spokesmen are affected by some "monstrosity," they are blind and moribund such as Saunderson in *Letter on the Blind*, or feverish and dreaming like D'Alembert. Through the study of pathological cases Diderot removes thinking from its original frame. He places his characters in an altered state of body and mind, extends the temporal and spatial limits of their comprehension. Thus their capacity to conceive possible relations between the phenomena of the world is enhanced, for in Diderot's understanding the interpretation of nature means the discovery of its liaisons (*liaisons*).[15] As far as the interpretation of nature is concerned, Diderot distinguishes between two kinds of order, a temporary one perceived by our senses, existing *hic et nunc*, and an underlying, ever

[13] Denis Diderot, "À Sophie Volland (le 31 août 1769)," in *Œuvres*, vol. 5: *Correspondance*, Laurent Versini (ed.) (Paris: Robert-Laffont, 1997), p. 969. "il faut souvent donner à la sagesse l'air de la folie." (My translation.)
[14] Spangler, "Les monstres textuels," p. 138.
[15] Denis Diderot, *Les Éléments de physiologie*, *Œuvres complètes*, vol. 17 (Paris: Hermann, 1987), p. 463. This idea is often referred to as the "theory of relations" (*théorie de rapports*) in studies on Diderot's works.

existing general order "the great totality" (*le grand tout*). The monster is closely related to the latter one, it is "a tangible irruption of the underlying totality (*Tout*) in the temporary order,"[16] because due to the continuous motion of the vast ocean of matter, in time "nature brings about everything that is possible, she will sooner or later produce some such strange composite."[17]

"Do mentally what nature sometimes does in reality," says Bordeu to Julie and invites her to produce in thought such strange composites that nature creates sometimes.[18] Their conversation recalls the rhetorics of theories of embryogenesis and teratogeny, but in Diderot's time. This dialogue is a perfect illustration of Diderot's fascination for scientific theories on life, and also of the particular use of poetic language invented by him to write about these issues. In their imaginative experiments Bordeu and Julie create freaks by manipulating the fibres and filaments of living organisms. According to the scientific views in Diderot's era, the structure of living organisms emerges on the following levels: molecules make up filaments or fibres which form bundles, then bundles joined together give rise to organs, and organs to organism, which can be imagined as a network of fibres. The latter is often likened to a spider web, as in *D'Alembert's Dream*.[19] If any thread in the web is affected, broken, tangled or crushed, the number of organs will be altered, which will result in the birth of *anomalies par excès* or *anomalies par défaut*.[20] Bordeu touches upon the Cyclops' case first to prove that the modification of a fibre entails the mutation of an organ. In order to create a Cyclops, he asks Julie to "cut away one of the threads in the bundle, for example the one

---

[16] Gerhardt Stenger, *Nature et liberté chez Diderot après l'*Encyclopédie, (Paris: Universitas, 1994), p. 181. "une irruption palpable du Tout dans l'ordre subsistant."

[17] Denis Diderot, *D'Alembert's Dream*, Leonard Tancock (trans.) (London: Penguin Books, 1966), p. 200. (This book contains the English translation of *Rameau's Nephew* and the trilogy of *D'Alembert's Dream*: *Conversation between D'Alembert and Diderot*, *D'Alembert's Dream*, *Sequel to the Conversation*. In what follows, reference will be made to the relevant part of the trilogy.)

[18] Ibid., p. 189.

[19] The image of the spider web is used by other authors, too, such as Pope and Montesquieu. In fact, it comes from scientific discourse. In the seventeenth century, it was used by the British physician Thomas Willis to describe his research on the nervous system, the arteries and the brain. See Mariana Saad, "Araignée," in *Encyclopédie du Rêve de d'Alembert*, Sophie Audidière, Jean-Claude Bourdin and Colas Duflo (eds.) (Paris: CNRS, 2006), p. 57.

[20] Gilles Barroux, "Monstre," in *Encyclopédie du Rêve de d'Alembert* (Paris: CNRS, 2006), p. 278.

that forms the eyes."[21] Fictional and factual elements are interwoven in the conversation, and real cases intrude into the speakers' imaginary world. Bordeu tells Julie the story of a dissection where the body of a deformed creature was opened up and "the scientist who dissected this particular monstrosity found it had only one optic thread."[22] It is also the optic thread that was probably affected in the organism of the blind Saunderson.

Fig. 1: Illustration of the Cyclops from Georges Buffon's *Histoire naturelle* (Paris, 1778). Reproduced by kind permission of the Old and Rare Book Collection, Somogyi Library, Szeged.

Bordeu's and Julie's minds are stirring, fibres are removed and doubled, and numerous freaks spew forth from the monster laboratory. The manipulation of the optic fibre is followed by that of the ears, the nose, the head, the hands and the feet. The removal of a single fibre from a bundle constituting the organ or the body part leads to the birth of an animal[23] without ears, nose, head, etc. However, the doubling of the

[21] Diderot, *D'Alembert's Dream*, p. 189.
[22] Ibid., p. 190.
[23] The use of the word *animal* is quite problematic in eighteenth century discourse. It has several meanings such as *living being*, *animal*, *human being*, etc. Jean-Pierre Seguin distinguishes between five senses of the word *animal* in Diderot's works: 1. a living being, 2. an animal (different from a human being), 3. a human being, 4. a

filaments result in animals with "two heads, four eyes, four ears, three testicles, three feet, four arms, six fingers to each hand."[24] After removing and doubling the filaments, Bordeu tells Julie to muddle them. This experiment means the rearrangement of anatomical parts: "the organs will be displaced: the head will be in the middle of the body, the lungs on the left, the heart on the right."[25] Sticking together the fibres may also give rise to freakish creatures, since "the organs will run into each other: the arms will be stuck to the body, the thighs, legs and feet will be all in one piece."[26] By manipulating the fibres any sort of monstrosity can be manufactured in the freak industry, any sort of monstrosity can join the freak show.

The border between waking and dreaming, reality and fiction fades away. The brainchildren of Bordeu and Julie come to life, and certain fictional characters have their real counterparts. The fissiparous human polyps in Jupiter or in Saturn, an image that Diderot uses to muse about the origins of life, become flesh and blood in the body of the conjoined twins. Julie recalls D'Alembert's dream and asks Bordeu about its truth quotient.

> MADEMOISELLE DE L'ESPINASSE: He went on: 'Well, Mr Philosopher, so you think there are polyps of all kinds, even human ones? But we don't find any in nature.'
> BORDEU: He obviously hadn't heard of the two girls who were connected by the head, shoulders, back, buttocks and thighs, and lived in that condition, stuck together, up to the age of twenty-two, and they died within a few minutes of each other.[27]

Although Diderot does not name the twins, relying on Andrew Curran's research further details can be added: "the monstrous twin sisters known as Hélène and Judith were born in Hungary and circulated through Europe in the early eighteenth century."[28] The twins born in the Hungarian village of Szőny were commented on and illustrated in Buffon's *Histoire naturelle* as the "plus frappants des monstres par excès."[29] Since the twins

---

monster, a human-animal combination, 5. an organ as a living being. *Diderot, le discours et les choses* (Paris: Librairie Klincksieck, 1978), pp. 51–9.

[24] Diderot, *D'Alembert's Dream*, p. 190.

[25] Ibid.

[26] Ibid.

[27] Ibid., p. 172.

[28] Curran, *Sublime Disorder*, p. 90.

[29] Georges Buffon, "Sur les Monstres," in *Histoire Naturelle, générale et particulière*, t. XXIII, Suppléments IV, 578. See the on-line edition of Buffon's

left Hungary at a very early age, it is not easy to find information about them in eighteenth century Hungarian sources. One of the rare texts is the book entitled *Kis gyermekek isputalja* by the physician Csapó József who includes his presentation of the "double children" (*kettős gyermekek*) and his own copy of an illustration he had at his hands.[30]

Fig. 2: Illustration of the Hungarian conjoined twins from Georges Buffon's *Histoire naturelle* (Paris, 1778). Reproduced by kind permission of the Old and Rare Book Collection, Somogyi Library, Szeged.

work: http://www.buffon.cnrs.fr/ (Accessed: 13 August 2012). "Dans la première qui comprend tous les monstres par excès, il n'y en a pas de plus frappans que ceux qui ont un double corps et forment deux personnes. Le 26 octobre 1701, il est né à Tzoni en Hongrie, deux filles qui tenoient ensemble par les reins *(voyez planche V);* elles ont vécu vingt-un ans; à l'âge de sept ans, on les amena en Hollande, en Angleterre, en France, en Italie, en Russie et presque dans toute l'Europe..."

[30] József Csapó, "Kettős Gyermekek," in *Kis Gyermekek Isputalja* (Nagykároly, 1771), pp. 28–9. The book can be found in the old and rare book collection of the Somogyi Library of Szeged: Somogyi-könyvtár (Szeged) Alapítványi gyűjtemény, D. e. 154.

Fig. 3.-4: Illustration and chapter of the "double children" of Szőny made by the Hungarian physician József Csapó in his book *Kis Gyermekek Isputalja* (Nagykároly, 1771). Reproduced by kind permission of the Old and Rare Book Collection, Somogyi Library, Szeged.

As for the idea of human polyps, Diderot is obviously inspired by Abraham Trembley's sectioning experiments conducted on the freshwater hydra, often referred to as polyp for its polyp-like arms. The Swiss naturalist published his results in his work *Memoir on the Natural History of a Species of Fresh Water, Horn-shaped Polyps* in 1744. Trembley's observations on the regenerative capacity of the hydra provide support for theories on reproduction, and on the development of organisms. He turned the hydras inside-out, cut them transversely and longitudinally into many pieces and was surprised to see that the parts of the polyp were able to regenerate separate and complete new individuals from each part. Diderot is fundamentally preoccupied with this idea, as a passage from his *Éléments de physiologie* reveals: "I would try to relate man's generation to that of the polyp which reproduces itself by division."[31]

Beside human polyps, other fictional and mythical creatures also appear in *D'Alembert's Dream*, such as the inseparable twin brothers Castor and Pollux. The story of their bodily incarnations, the conjoint twins of Rabastens, can be read in the the *Gazette de France*:

[31] Diderot, *Éléments de physiologie,* p. 431. "Je serais tenté de ramener la génération de l'homme à celle du polype qui se reproduit par division."

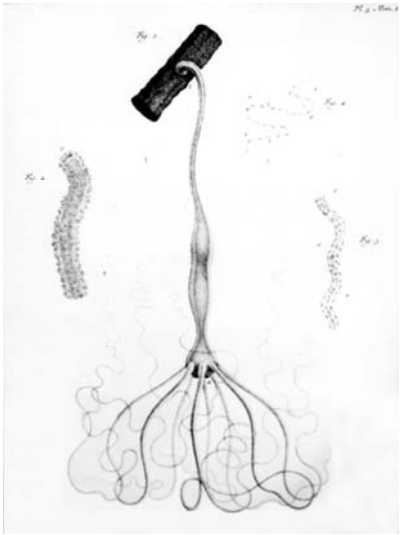


Fig. 5: "Freshwater Hydra," Illustration from Abraham Trembley's *Memoir on the Natural History of a Species of Fresh Water, Horn-shaped Polyps* (1744).

> BORDEU: The fable of Castor and Pollux in real life. Two children, the life of one of whom caused the immediate death of the other, and the return to life of that one meant the death of the first. […]
> MADEMOISELLE DE L'ESPINASSE: I fear, doctor, that you're taking advantage of my credulity. [...]
> BORDEU: Do you ever read the *Gazette de France*? [...] Get somebody to lend you the number for the 4th of September, and you will see that at Rabastens, in the diocese of Albi, two girls were born back to back, joined by their lowest lumbar vertebrae, the buttocks and the hypogastric region. [...]
> MADEMOISELLE DE L'ESPINASSE: A very extraordinary case.[32]

[32] Ibid., pp. 198–9.

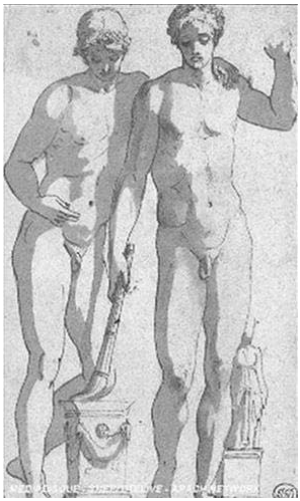


Fig. 6: *Castor and Pollux*, Nicolas Poussin (ca. 1628) Pen and brown wash on paper, 24.6 x 17 cm. Drawing after the so-called San Ildefonso Group, in Prado.

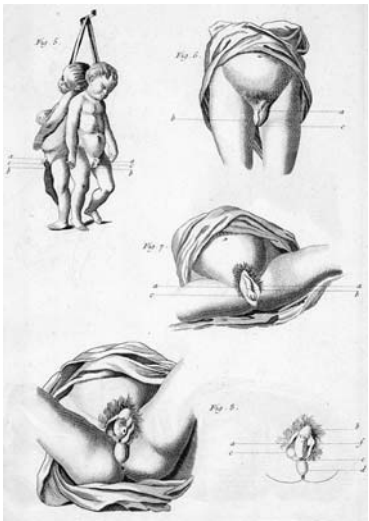


Fig. 7: "Différentes espèces d'hermaphrodites," *Histoire naturelle*, *Suppléments aux Planches* (Planche II), *Encyclopédie de Diderot et D'Alembert.* Reproduced by kind permission of the Old and Rare Book Collection, National Széchenyi Library, Budapest.

Apart from the doubling of the fibres, other modifications may also result in the birth of odd species. Filaments could also give rise to a new organ, and nature may also form a bundle of threads characteristic of both sexes, which explains the constitution of hermaphroditic bodies.[33]

In Diderot's thought, the issue of the hermaphrodite can be associated with the social and cultural embededness of identity. The question of the sexes and sexual identity are discussed in connection with monstrosity: for Diderot the difference between the male and the female is not absolute, but relative. As Andrew Curran claims, "the separateness of male and female sexual identities are deconstructed by Julie," there seems to be "a certain organic equality between the sexes," "men and women share the same epigenetic history."[34] Diderot imagines that males are only a monstrous variety of females, while woman is the monster of man. The waking D'Alembert summarises what Julie and Bordeu have set forth on the relation of the sexes:

> D'ALEMBERT: […] You were telling her that the uterus is nothing but a scrotum turned inside, and that during this process the testicles were thrown out from the envelope containing them and distributed to left and right of the abdominal cavity; that the clitoris is a miniature male organ, that this male organ in the female gets smaller and smaller as the uterus, or reversed scrotum, gets bigger… [35]

Diderot, as Anne Deneys-Tunney puts it, "constructs an ideal biological universe where everything/ everybody (*tout*) is included in everything/ everybody; everything/ everybody is itself and the other at the same time,

---

[33] In *D'Alembert's Dream*, Diderot refutes Louis de Jaucourt's idea (one of the contributor to the *Encyclopédie*), according to which veritable hermaphrodites do not exist. ("Hermaphrodite," in *Encyclopédie de Diderot et D'Alembert*.) The issue of the hermaphrodite is discussed in details in Diderot's *Éléments de physiologie*, where the freak is equally present. This text reveals several cases of hermaphroditism. For instance, a Prussian soldier whose rectal cyst turns out to be a well-formed foetus. Besides the story of the hermaphrodite soldier, the *Éléments* mentions a woman who after one year of marriage becomes a man and grows a penis from her vagina, etc.

[34] Curran, *Sublime Disorder*, p. 100.

[35] Diderot, *D'Alembert's Dream*, p. 193. The image of the uterus as a scrotum turned inside is not a thought unique to the philosophy of Diderot but a widespread idea of ancient times. Thomas Laqueur mentions this one-sex model of sexuality—"the ancient construction of woman as an inferior, internalized man"—in his book *Making Sex*. See Thomas Laqueur, *Making Sex. Body and Gender from Greeks to Freud* (Cambridge, MA.: Harvard University Press, 1992), p. 158.

the dream of the complementarity of the two (double) sexes mirroring each other, the dream of the fusion of one in the other."[36] There are no separate gender identities, and no clear dividing lines between individuals or beings. As Bordeu stresses, this non-differentation of identity can be extended beyond the realm of gender, to a more general human, and even trans-human plane too, where,

> all creatures are involved in the life of all others, consequently every species… all nature is in a perpetual state of flux. Every animal is more or less a human being, every mineral more or less a plant, every plant more or less an animal ….There is nothing clearly defined in nature.[37]

All the beings are in relation and combination with one another dissolved in the totality of the *grand tout*. Apart from the totality of the universe, the term *tout* also designates the unity of the individual in Diderot. The *tout* can be imagined as the combination of parts, be they molecules, atoms, animals, species, individuals or forms.[38] Therefore, human beings can be conceived as a unity or unities of molecules, fibres and organs connected to one another forming themselves part of the "one great individual"[39] that is the totality of nature.

As Gerhardt Stenger remarks, for Diderot, the *tout* forms an endless, open whole, and "the parts or individuals do not exist as separate entities."[40] All the beings are linked to one another through an infinite number of relations and they form a complex network split up in branches and rich in connections, knots and confluences.[41] "Once the organization of a body is established, it becomes the origin of the organization of other

---

[36] Deneys-Tunney Anne, *Écritures du corps. De Descartes à Laclos* (Paris: PUF, 1992), p. 177. (In the French original: "Diderot construit un univers biologique idéal où tout est dans tout, tout est l'un et l'autre à la fois; il construit le rêve de la complémentarité des deux sexes (doubles), miroirs l'un de l'autre, le rêve de la fusion de l'un de l'autre.")

[37] Ibid., p. 181.

[38] Jean-Claude Bourdin, "Tout," in *Encyclopédie du Rêve de D'Alembert* (Paris: CNRS, 2006), p. 365. On the relationship of part to whole in Diderot's philosophy see Andrew H. Clark's work *Diderot's Part* (Aldershot and Burlington: Ashgate, 2008).

[39] Diderot, *D'Alembert's Dream*, p. 181.

[40] Stenger, *Nature et liberté*, pp. 214–5. "Le Tout est un tout holistique mais infini, [...] les parties ou individus n'existent pas en soi mais sont liés entre eux par une infinité de relations."

[41] Ibid., p. 148.

bodies," as it is stated in the entry "Organisation" of the *Encyclopédie*.[42] Doctor Bordeu comments on the extending network of the body as follows.

> BORDEU: And very good prose, too, as you are about to see. Anyone who only knows man in the form he presents at birth doesn't know anything about him at all. Man's head, feet, hands, all his limbs, his viscera, his organs, nose, eyes, ears, heart, lungs, intestines, muscles, bones, nerves, membranes are really nothing more than crude extensions of a network which takes form, grows, extends and throws out a multitude of imperceptible threads.[43]

Diderot has a physiological concept of identity. He explains everything with the body and the body is central to his ideas about man.[44]

After the manipulation of human embryo fibres, new types of experiments are undertaken in the monster laboratory: Bordeu and L'Espinasse speculate about the creation of hybrids.[45] The doctor proposes to Julie that they should cross humans with goats to produce "goat-footed beings" (*chèvre-pieds)*. The aim of the imaginary experiment is of moral nature, too. Goat-men could replace the slaves in the French colonies who would not have to be reduced to the inhuman condition of beasts of burden. Similarly to the above mentioned monstrous cases, Diderot's poetic description of the goat-man is a unique mixture of real and fabulous elements, for, as Bordeu says, "the art of creating fictional beings in imitation of real ones is true poetry."[46] Imagining possible relations

---

[42] Unknown author, "Organisation," in *Encyclopédie de Diderot et D'Alembert*. "L'*organisation* d'un corps une fois établie, est l'origine de l'*organisation* de tous les autres corps."

[43] Diderot, *D'Alembert's Dream*, p. 183.

[44] As he says, "Je défie qu'on explique rien sans le corps." Diderot, *Éléments de physiologie*, p. 334.

[45] The question of hybrids is examined in the *Sequel to the Conversation*, the last part of the trilogy. Doctor Bordeu regrets that very few experiments on cross-breeding have been tried so far. Despite the high interest in the issue only a few experiments on cross-breeding are reported from the eighteenth century. Réaumur stated that he had managed to cross rabbits with hens. Allusions to this experiment can be found in the works of La Mettrie and Maupertuis. Maupertuis carried out experiments himself and crossed different dog breeds, and also canaries with pigeons. See *Vénus physique* by Pierre Louis Moreau de Maupertuis. Charles Bonnet tried to cross cocks with ducks. See Notes for *Le Rêve de d'Alembert*, *Œuvres*, vol. 1: *Philosophie*, Laurent Versini (ed.) (Paris: Robert-Laffont, 1994), p. 674.

[46] Diderot, *Sequel to the Conversation*, p. 226.

between phenomena on the basis of actual, observable ones is a key method in Diderot's interpretation of nature. Compared to other thinkers of his time, such as Condillac or Voltaire, the cognitive function of imagination is re-evaluated by him.[47]

In Diderot's materialist worldview, the language used to describe the phenomena of the constantly changing nature as well as the knowledge relating to them is not a fixed and precise one. Moreover, scientific language is not yet standardised in 1769. Poetic formulation and "figurative language" prove to be the proper means to convey ideas which remain vague and indistinct sometimes.[48] Diderot's imagery is an appropriate means to express analogies and conjectures which are the *par excellence* methods of his thought. Yet, it is necessary to set limits to imagination and to be cautious with wild conjectures. As Diderot emphasises in his *Thoughts on the Interpretation of Nature* (*Pensées sur l'interprétation de la nature*),[49] the experimental verification of theories is of crucial importance. Reflection and observation should supplement each other in empirical inquiry, while experiment, the third means of acquiring knowledge, has to be taken into consideration as well.[50]

The irony in Bordeu's description of Réamur's research on cross-breeding shows well that the doctor contests the adequacy of the methods used in the experiments:

> But here's a strange story which many educated people will guarantee is true, but which is false. They claim to have seen in the Archduke's farmyard an abominable rabbit which acted as cock to a score of shameless hens who seemed quite willing to put up with it, and they will add that they have been shown chickens covered with fur which were the fruit of this bestiality. Of course they were laughed at.[51]

Bordeu points out that the passage between nature's creatures is gradual. Methods used in cross-breeding experiments should be in accord with

---

[47] Eric-Emmanuel Schmitt, *Diderot ou la philosophie de la séduction* (Paris: Albin Michel, 1997), pp. 182–3.
[48] Diderot, *D'Alembert's Dream*, p. 220.
[49] Denis Diderot, *Pensées sur l'interprétation de la nature*, *Œuvres*, vol. 1: *Philosophie*, Laurent Versini (ed.) (Paris: Robert-Laffont, 1994), pp. 560–600.
[50] See 9th and 15th Thoughts in Diderot's *Pensées sur l'interprétation de la nature*, p. 564 and p. 566. 9th Thought: "(…) Tout se réduit à revenir des sens à la réflexion, et de la réflexion aux sens: rentrer en soi et en sortir sans cesse." 15th Thought: "Nous avons trois moyens principaux: l'observation de la nature, la réflexion et l'expérience."
[51] Diderot, *Sequel to the Conversation*, pp. 231–2.

nature's laws and workings because if the continuity in the chain of beings is not respected, such shameless creatures as fury chickens will be formed. In Diderot's conception, "in nature everything is bound up with everything else," and "there cannot be a gap in the chain."[52] As Michel Foucault claims in the chapter "Monsters and Fossils" in *The Order of Things*, Diderot is one of those thinkers in the eighteenth century who are advocating the postulate of the continuity of nature, and who offers a discussion of the transformation of living things in his texts.

> That Bonnet, Maupertuis, Diderot, Robinet, and Benoît de Maillet all very clearly articulated the idea that living forms may pass from one into another, that the present species are no doubt the result of former transformations, and that the whole of the living world is perhaps in motion towards a future point, so that one cannot guarantee of any living form that it has been definitively acquired and is now stabilized forever.[53]

Supposing continuity means "the necessity of introducing monsters into the scheme—forming the background noise, as it were, the endless murmur of nature."[54]

Like the hybrid creatures of "goat-footed men" (*chèvre-pieds*), the "orang-outang"[55] is also represented as an example of the continuity of beings. Both are called "savage men," and the case of the orangutan is evoked as a sequel to the story of the goat-man in Bordeu's and Julie's monster laboratory. In the eighteenth century the orangutan is considered to be a link between animals and humans.[56] In France, the first orangutan shown at the Saint Germain fair in 1720 provoked debates over the

---

[52] Diderot, *D'Alembert's Dream*, p. 181.

[53] Michel Foucault, *The Order of Things. An Archeology of the Human Sciences* (New York: Routledge, 2002), p. 164. Foucault remarks that "such analyses are incompatible with what we understand today by evolutionary thought." "This 'evolutionism' is not a way of conceiving of the emergence of beings as a process of one giving rise to another, in reality, it is a way of generalizing the principle of continuity and the law that requires that all beings form an uninterrupted expanse," p. 165.

[54] Ibid., p. 169.

[55] In the English translation of Diderot's text, Leonard Tancock uses the seventeenth century spelling of the word *orangutan*. See *D'AIembert's Dream*, p. 233. In what follows, I wish to use the contemporary spelling of the word: *orangutan*.

[56] Arthur O. Lovejoy, *The Great Chain of Being* (New York: Harper Torchbooks, 1965), p. 265. One can learn about the *orangutan* from the works of several eighteenth century naturalists, such as La Mettrie (*Histoire naturelle de l'âme*) or Benoît de Maillet (*Telliamed*).

resemblances between apes and men, and in particular over the dilemma whether orangutans can acquire the faculty of speaking. The orangutan is the final example in Diderot's texts, with this monstrous being the imaginary experiments practically come to an end.

Fig. 8: Illustration of the Jocko from Georges Buffon's *Histoire naturelle* (Paris, 1775). Reproduced by kind permission of the Old and Rare Book Collection, Somogyi Library, Szeged.

The discussion about goat-men and orang-utans "involves physical science, morals and poetics"[57] at the same time. In the heat of the conversation Julie calls Bordeu a "monster" who ripostes immediately that it is not him but nature or society that is monstrous. Bordeu's rejoinder bears a close relation with Diderot's concept of the universe as an "assembly of monstrous beings" (*assemblage d'êtres monstrueux*).[58] For Diderot, matter's monstrosity is as natural as its constant flux. In his view, monsters de*monstrate* the workings of nature; they are concomitant beings of the continuously evolving, ever existing matter. In such a universe the term *normality* loses its meaning and the boundaries between *normal* and *abnormal* become indistinct. Thus the word *monster*, as a "being that is a challenge to the natural order," becomes nonsensical because it can only be understood in terms of norms related to a temporary order. The contemporary division of species can correspond only to a momentary

[57] Diderot, *Sequel to the Conversation*, p. 226.
[58] Diderot, *Éléments de physiologie*, p. 444.

equilibrium of the continuous "complexification" of nature, for in the Diderotian universe instead of one, single order there are several "orders."

As Andrew Curran claims, in *D'Alembert's Dream* Diderot's view of the freak "no longer evokes disorder and transgression on a metaphysical or anatomical level," for him monsters are the manifestation of a different temporal order, "simply different results of the same generative process."[59] Compared to common beings the freak has a shorter lifespan and is fewer in number but also forms part of nature's totality. As Diderot claims, "man is merely a frequent effect, a monstrosity is a rare one, but both are equally natural, equally inevitable, equally a part of the universal and general order."[60] The question of norms in relation to monstrosity and matter is very well summarized by Norman Laidlaw in his study on Diderot's teratology:

> In the "dépérissement éternel" all forms and structures have changed, are changing and will continue to change. Matter alone endures. What appears at a given moment to be permanent soon proves ephemeral. What is today's monster may be tomorrow's norm—or it may disappear entirely.[61]

For Diderot, the monster cannot be unnatural because "nothing that exists can be against nature or outside nature."[62] However, it is important to highlight what Andrew Curran also points out: "although Diderot may naturalise the monster, he never *normalises* its existence."[63]

Diderot's scientific theories on life are closely in line with his thoughts on morals saying that man's ideas and moral position are determined by

---

[59] Curran, *Sublime Disorder*, p. 109.
[60] Diderot, *D'Alembert's Dream*, p. 181.
[61] Laidlaw, "Diderot's Teratology," p. 112. The expression "dépérissement éternel" means *eternal decline*. According to Diderot's dynamic materialism, organic forms are generated in nature's flux, matter goes through periodic stages of growth, maturity and decline.
[62] Diderot, *Sequel to the Conversation*, p. 230.
[63] Curran, *Sublime Disorder*, p. 12. There is a debate among scholars about Diderot on the question of the monster as a norm. Some of them, like Andrew Curran, Annie Ibrahim, and Emita Hill claim that the monster becomes naturalised but not normalised in Diderot, while others put the notion of the monster in parallel with that of moral norm. "La réflexion de Diderot, 'L'univers ne semble quelquefois qu'un assemblage d'êtres monstrueux' est déroutante: si le monstre est le plus souvent considéré comme un écart de la nature (ce qu'il nous faudra examiner), comment peut-il être aussi la norme de l'univers? Comment peut-on penser le monstre non plus en tant que simple écart, mais en écart qui serait constitutif d'une norme?" Spangler, "Les monsters textuels," pp. 141–2.

the material state of his body. Diderot's thoughts on monstrosity also constitute an attack on norms, the critic of conventional morality, and society. Although he does not question the necessity and respect of norms in a society, he claims that they have to be based on the functioning of (human) nature. Reflection on laws and morals should always be founded on the nature of man; otherwise man can be made a monster by a monstrous society.[64] Instead of being a product of nature, the moral monster could be a construction defined by temporarily set social norms.[65]

The allusion to an "avalanche" of monstrous cases in *D'Alembert's Dream*, a work containing the quintessence of Diderot's theories on life, shows that he sees the monster as pivotal to the study of man and nature. The freak, discussed on physical, poetic and moral planes, becomes the emblem of a universe in constant flux, of the relative, and ephemeral nature of man and his ideas. In such a universe, where everything changes and passes away, all the beings imagined as a network of fibres are connected to one another to form a totality. Imbued with this relational model Diderot's physiologically based concept of identity refers to the absence of separate identities and clear boundaries between individuals. Besides the demonstration of the phenomena of nature and the formation of identity, the freak accounts for the relativisation of norms, too. Not only does it facilitate an inquiry into the presumed order of nature, but it also provides grounds for the examination of society. For Diderot, the monster proves that one cannot rush to conclusions concerning the workings of nature because nature, due to its infinite creativity, realises in time all possible composites that may exceed the possibilities of human understanding.[66]

Works Cited

Barroux, Gilles. "Monstre," in *Encyclopédie du Rêve de d'Alembert*. Edited by Sophie Audidière, Jean-Claude Bourdin, Colas Duflo. Paris: CNRS, 2006. pp. 277–80.

Buffon, Georges-Louis Leclerc. "Sur les Monstres," in *Histoire naturelle, générale et particulière*, t. XXIII (Suppléments IV), Paris: Imprimerie

[64] Michèle Duchet, "L'Anthropologie de Diderot," *Anthropologie et histoire au siècle des Lumières*, Michèle Duchet (Paris: Albin Michel, 1995), p. 429.

[65] The question of ethical monstrosity could be discussed in details in connection with another text by Diderot, namely *Rameau's Nephew*. Concerning the issue of the ethical monster see "Ethical monstrosity and the Enlightenment's *rejeton*, Jean-François Rameau," in Andrew Curran's *Sublime Disorder*.

[66] I wish to express my gratitude to Csaba Maczelka for polishing my English.

Royale, 1777. pp. 578–82. Available: http://www.buffon.cnrs.fr/ (Accessed: 13 August 2012). *Buffon et l'histoire naturelle (édition en ligne)*. Online edition of Buffon's work, website created and edited by Pietro Corsi and Thierry Hoquet.

—. "Le jocko, Planche I," in *Œuvres complètes de M. le C^te^ de Buffon. Histoire naturelle, générale et particulière, servant à l'histoire naturelle de l'homme*, t. VII, Paris: Imprimerie Royale, 1775, p. 100. The book can be found in the Old and Rare Book Collection of the Somogyi Library of Szeged. The reproduction of the illustration was authorized by Erzsébet Szőkefalvi-Nagy. Source: Somogyi-könyvtár (Szeged), Alapítványi gyűjtemény, E. c. 705.

—. "Planche V, non légendée [sœurs siamoises]," in *Œuvres complètes de M. le C^te^ de Buffon. Histoire naturelle, générale et particulière, servant à l'histoire naturelle de l'homme*, t. XI, Paris: Imprimerie Royale, 1778, p. 582. The book can be found in the Old and Rare Book Collection of the Somogyi Library of Szeged. The reproduction of the illustration was authorized by Erzsébet Szőkefalvi-Nagy. Source: Somogyi-könyvtár (Szeged), Alapítványi gyűjtemény, E. c. 705.

—. "Planche VI, non légendée [tête de monstre bébé en cire]," in *Œuvres complètes de M. le C^te^ de Buffon. Histoire naturelle, générale et particulière, servant à l'histoire naturelle de l'homme*, t. XI, Paris: Imprimerie Royale, 1778, 582. The book can be found in the Old and Rare Book Collection of the Somogyi Library of Szeged. The reproduction of the illustration was authorized by Erzsébet Szőkefalvi-Nagy. Source: Somogyi-könyvtár (Szeged), Alapítványi gyűjtemény, E. c. 705.

Clark, Andrew H. *Diderot's Part*. Aldershot and Burlington: Ashgate, 2008.

Courtine, Jean-Jacques. "Le corps inhumain," in *Histoire du corps. De la Renaissance aux Lumières*, Volume 1. Edited by Georges Vigarello, Alain Corbin, Jean-Jacques Courtine. Paris: Seuil, 2005, pp. 373–86.

Csapó, József. "Kettős Gyermekek," in *Kis Gyermekek Isputalja*. Nagykároly: 1771, pp. 28–9. The book can be found in the Old and Rare Book Collection of the Somogyi Library of Szeged. The reproduction of the illustration and the relevant chapter of Csapó's work were authorized by Erzsébet Szőkefalvi-Nagy. Source: Somogyi-könyvtár (Szeged), Alapítványi gyűjtemény, D. e. 154.

Curran, Andrew. *Sublime Disorder. Physical Monstrosity in Diderot's Universe*, Oxford: Voltaire Foundation, 2001.

Diderot, Denis. *D'Alembert's Dream*, translated by Leonard Tancock, New York: Penguin Classics, 1976.

—. *Éléments de physiologie*, *Œuvres complètes*, Volume 17, Paris: Hermann, 1987. pp. 291–574.
—. *Pensées sur l'interprétation de la nature*, *Œuvres*, Volume 1: *Philosophie*. Edited by Laurent Versini. Paris: Robert-Laffont, 1994.
—. *Lettre sur les aveugles à l'usage de ceux qui voient*, *Œuvres*, Volume 1: *Philosophie*. Edited by Laurent Versini. Paris: Robert-Laffont, 1994, pp. 139–85.
—. *Additions à la Lettre sur les aveugles*, *Œuvres*, Volume 1: *Philosophie*. Edited by Laurent Versini. Paris: Robert-Laffont, 1994, pp. 187–96.
—. *Le Rêve de d'Alembert*, *Œuvres*, Volume 1: *Philosophie*. Edited by Laurent Versini, Paris: Robert-Laffont, 1994, pp. 611–76.
—. "À Sophie Volland (le 31 août 1769)," in *Œuvres*, Volume 5: *Correspondance*. Edited by Laurent Versini. Paris: Robert-Laffont, 1997, p. 969.
Deneys-Tunney, Anne. *Écritures du corps. De Descartes à Laclos*. Paris: PUF, 1992.
Duchet, Michèle. "L'Anthropologie de Diderot," in *Anthropologie et histoire au siècle des Lumières*. Paris: Albin Michel, 1995, pp. 407–73.
Formey, Jean Henri Samuel. "Monstre," in *Encyclopédie de Diderot et D'Alembert, ou dictionnaire raisonné des sciences, des arts et des métiers*. CD-ROM edition, Paris: Redon, 2001.
Foucault, Michel. *The Order of Things. An Archeology of the Human Sciences*. New York: Routledge, 2002.
Goodden, Angelica. *Diderot and the Body*. University of Oxford: Legenda, 2001.
Jaucourt, Louis de. "Hermaphrodite," in *Encyclopédie de Diderot et D'Alembert, ou dictionnaire raisonné des sciences, des arts et des métiers*, CD-ROM edition, Paris: Redon, 2001.
Laidlaw, Norman. "Diderot's Teratology," in *Diderot Studies* 4 (1963): pp. 105–29.
Laqueur, Thomas. *Making Sex. Body and Gender from Greeks to Freud*. Cambridge, Mass.: Harvard University Press, 1992.
Lovejoy, Arthur O. *The Great Chain of Being*. New York: Harper Torchbooks, 1965.
Poussin, Nicolas. *Castor and Pollux*. Pen and brown wash on paper, 24.6 x 17 cm. Drawing after the so-called San Ildefonso Group, in Prado. ca. 1628.
Saad, Mariana. "Araignée," in *Encyclopédie du Rêve de d'Alembert*. Edited by Sophie Audidière, Jean-Claude Bourdin, Colas Duflo. Paris: CNRS, 2006. pp. 56–7.

Schmitt, Eric-Emmanuel. *Diderot ou la philosophie de la séduction*. Paris: Albin Michel, 1997.

Seguin, Jean-Pierre. *Diderot, le discours et les choses*. Paris: Librairie Klincksieck, 1978.

Spangler, May. "Les monstres textuels dans le transformisme de Diderot," in *Diderot Studies* 29 (2003): pp. 137–60.

Stenger, Gerhardt. *Nature et liberté chez Diderot après l'*Encyclopédie. Paris: Universitas, 1994.

Trembley, Abraham. "Polype d'eau douce," in *Mémoire pour server à l'histoire d'un genre particulier de polype d'eau douce à bras en forme de cornes,* Leide: Chez Jean et Herman Verbeek, 1744. Available on google books. The illustration can be downloaded from the site of wikipedia: http://en.wikipedia.org/wiki/Abraham_Trembley.

Unknown author. "Organisation," in *Encyclopédie de Diderot et D'Alembert ou dictionnaire raisonné des sciences, des arts et des métiers*. CD-ROM edition, Paris: Redon, 2001.

"Différentes espèces d'hermaphrodites," in *Encyclopédie de Diderot et D'Alembert, ou dictionnaire raisonné des sciences, des arts et des métiers*, *Histoire naturelle*, *Suppléments aux Planches* (Planche II). The reproduction of the illustration was authorized by Éva Bagi Pataki, Head of Readers' and Customers' Service Department. Source: Old and Rare Book Collection, National Széchenyi Library, Budapest.